In environmentally sensitive areas of the corridor, low retaining walls made of rock, block, or timber should be considered to replace wide, gradual cut/fill slopes that will require significant revegetation.

DESIGN FOR ENVIRONMENTALLY SENSITIVE AREAS

To reduce the area of impact in environmentally sensitive areas, design exceptions to Class I standards should be considered to reduce overall bike path widths. In particular, the two-foot unpaved shoulders on each side of the eight-foot path could be reduced, or possibly eliminated provided enough horizontal/vertical clearance from adjacent vegetation was maintained to not pose a safety hazard. Low retaining walls made of rock, block or timber could replace engineered cut/fill slopes to reduce the width of vegetation clearing and earthwork necessary for trails developed in sloping terrain. For SEZ and wetland areas, alternative bike path designs such as boardwalks or bridge spans should be considered.

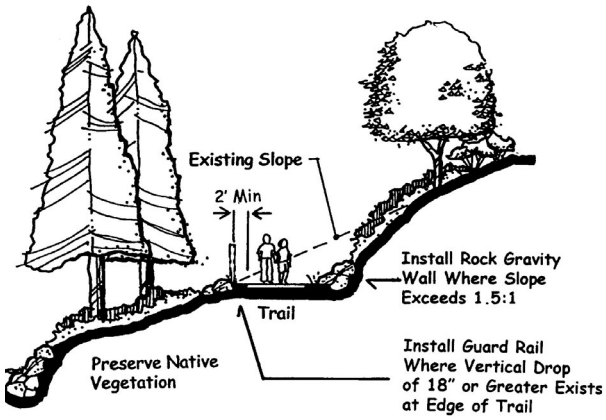
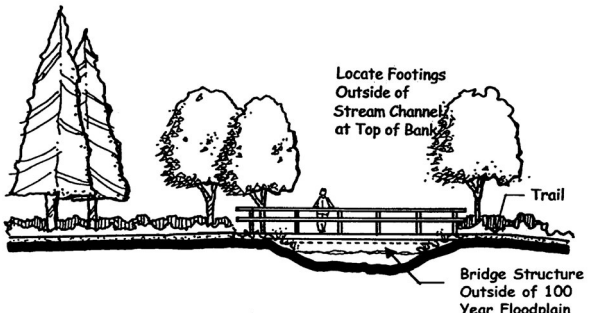
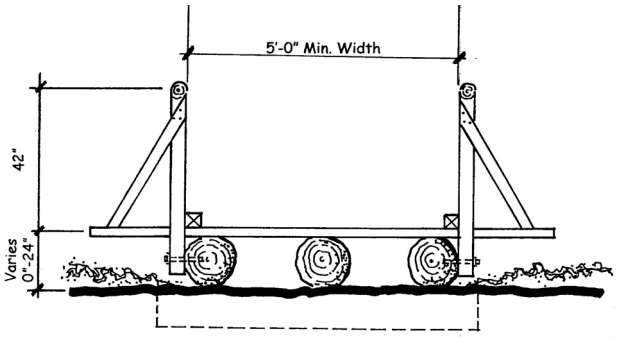


Illustration of Low Retaining Wall in Steep Slope Area



Bridge Span Concept



Boardwalk Concept

CLASS II BIKE LANES

As noted earlier, Class II Bike Lane striping/stenciling is not proposed for the On-Highway Bikeway option. Wide shoulder striping was determined to be the appropriate on-road bikeway treatment for the SR-89 corridor. This treatment is discussed below under Class III Bikeways.

CLASS III BIKEWAYS

Generally referred to as a "bike route," a Class III bikeway provides routes through areas not served by Class I or II facilities or to connect discontinuous segments of a bikeway. Designated bike routes should provide benefits to bicyclists over other alternative roadways by adjusting traffic control devices to give priority to bicycles, restricting on-street parking, more frequent maintenance, and/or better surface conditions.

Class III facilities can be shared with either motorists on roadways or pedestrians on a sidewalk (not advisable) and is identified only by signing. There are no recommended minimum widths for Class III facilities, but when encouraging bicyclists to travel along selected routes, traffic speed and volume, parking, traffic control devices, and surface quality should be acceptable for bicycle travel.

On-Highway Bikeway Option

With the implementation of widened shoulders, as discussed in chapter 4, the entire length of SR-89 from Spring Creek Road to Sugar Pine Point State Park is a recommended Class III route. Where possible, four-foot shoulders are desired on both sides of the roadway, although two-foot shoulders may be the only possibility along some roadway segments.

In some constrained areas it may not be possible to widen the shoulder on both sides. In these areas, providing a wider shoulder on the uphill side only should be considered. This "differential" shoulder striping would provide the greatest benefit to slow-moving bicyclists, giving vehicles additional room to pass without crossing the centerline.

Off-Highway Bikeway Option

Two Class III segments are recommended on low-traffic roadways as part of the Off-Highway Bikeway option. Existing Park roads in D. L. Bliss State Park will lead bicyclists from the Service Road to the main Park entrance and the Lester Beach Transit Stop. Other off-highway on-street bike route will follow low-traffic residential streets in Rubicon Bay that roughly parallel SR 89.

SIGNAGE

Class III bike routes are signed with the Bike Route (D11-1) sign. These signs should be located at regular intervals along the route so bicyclists know they are still on the preferred route and bicyclists entering the bikeway from side streets are aware that they are on the bike route. These signs can provide more functionality if they are combined with supplemental plates beneath them. These plates can indicate a directional change in the bikeway, lead bicyclists to key destinations, or give distances.

To avoid sign clutter along scenic portions of SR-89, minimal bike route signs are recommended on the highway. However, bike route signs with directional arrows should be installed along the on-street segments of the proposed Off-Highway Bikeway alignment, particularly where the route changes streets. At a minimum, these signs should indicate changes in direction and point out popular destinations.

BICYCLE PARKIING

Bicycle parking is recommended at enhanced transit stops and visitor attractions along the corridor. Long-term parking, such as bike lockers, may not be appropriate in most locations. Bike racks will be adequate for the visitors that want to lock their bicycles while they hike, stop for food and drink, or rest.

When choosing bike racks, there are a number of things to keep in mind:

- The rack element (part of the rack that supports the bike) should keep the bike upright by supporting the frame in two places allowing one or both wheels to be secured.
- Position racks so there is enough room between adjacent parked bicycles. If it becomes too difficult for a bicyclist to easily lock their bicycle, they may park it elsewhere and the bicycle capacity is lowered. A row of inverted "U" racks should be situated on 30" minimum centers.
- Empty racks should not pose a tripping hazard for visually impaired pedestrians. Position racks out of the walkway's clear zone.
- When possible, racks should be in a covered area protected from the elements.

Figure 5-6 shows common bike racks styles.

BIKES AND TRANSIT

The ability to bring bicycles on buses and trolleys is essential to encourage bicyclists to extend travel distances, allow them to avoid steep hills or potentially dangerous roadways, and provide safe travel in the dark. Standard front-loading bus bike racks hold two bicycles, are designed for easy loading/unloading, and meets California Motor Vehicle Code regulation for maximum protrusion lengths of buses. However, because the rack can only hold two bicycles, visitors could face long waiting periods until a bus arrives with available space, especially during peak periods. A four-bike front-loading rack has been developed and is used on some buses from Tahoe City. Bike trailers designed to carry several bicycles pulled by the transit buses could be another option during especially heavy use.

In addition to front-loading racks, bicycles should be allowed inside the bus or trolley. Open spaces or folding bench seating that can create more open space would provide an area for in-board bicycles. These areas are usually designated for wheelchair users, and they must take priority over in-board bicycles.

Many of the transit vehicles in use along this corridor are the vintage look trolley buses. Some people are concerned that bike racks and trailers would distract from the charm of these vehicles. Although the appearance of the trolley would change with the addition of bike racks, the functionality of the transit service would be improved for cyclists.